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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,001	12/30/2003	Yat Kwong Lai	99,722	8375

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EXAMINER

HEITBRINK, TIMOTHY W

ART UNIT PAPER NUMBER

1722

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/749,001	LAI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tim Heitbrink	1722	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Tim Heitbrink. (3) Jori Schiffman (reg # 57,628).  
 (2) Sean Sullivan (reg # 40,191). (4) \_\_\_\_\_.

Date of Interview: 28 August 2006.

Type: a) ☒ Telephonic b) ☐ Video Conference  
 c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
 If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: proposed claims 1 and 20.

Identification of prior art discussed: Aoki.

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Discussed the above claims in view of Aoki. Proposed claim 20 distinguishing from Aoki since Aoki does not disclose direct communication of the first and second nozzles. Aoki still applicable to proposed claim 1 since the product limitations do not further limit the apparatus.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
 Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.



McDonnell Boenhen Hulbert &amp; Berghoff LLP

## Fax transmittal

To	Examiner Tim Heitbrink	Date	August 25, 2006
Company	USPTO	From	Jori R. Schiffman
Fax	571-273-1132	Direct	312-913-3334
Phone	571-272-1132	Email	schiffman@mbhb.com
Copy To		C/M	
Pages, with cover	7		
Re	Application Serial No. 10/749,001		

Examiner,

Enclosed please find a proposed amendment that we would like to discuss during our telephone interview on Monday, August 28. Please feel free to contact me should you have any questions.

Thanks,  
Jori Schiffman

300 South Wacker Drive  
Chicago, Illinois 60606-6709  
www.mbhb.com

312 913 0001 phone  
312 913 0002 fax

This transmittal is strictly for delivery only to the person listed above. It may contain confidential or privileged information, the disclosure of which is prohibited.

Please contact us if all pages are not received. If you received this fax in error, please contact us to arrange for return of the document.

**PROPOSED AMENDMENT**

What is claimed is:

1. (Currently amended) An injection molding apparatus for molding ~~products~~

5 closures comprising:

a first cavity chamber for forming a seal liner of a closure, the first cavity chamber having an outer edge;

a second cavity chamber for forming a shell of a closure, the second cavity chamber being positioned adjacent to the first cavity chamber, the second cavity chamber having  
10 a center;

a first nozzle for a seal liner material positioned near the outer edge of the first cavity chamber, the first nozzle being in communication with the first cavity chamber;

a second nozzle for a shell material positioned near the center of the second cavity chamber, the shell material being different from the seal liner material, the second nozzle being  
15 in communication with the second cavity chamber; and

a mold core positioned in and moved between the first and second cavity chambers.

2. (Original) The injection molding apparatus of claim 1 wherein the mold core is  
20 rotationally moved between the first and second cavity chambers.

3. (Original) The injection molding apparatus of claim 1 further comprising a  
stripper plate positioned around the mold core for removing shells from the mold core.

4. (Original) The injection molding apparatus of claim 1 wherein the mold core has  
an end opposite a base, the end having a seal liner portion for forming a seal liner cavity opening  
with the first cavity chamber, and a shell portion for forming a shell cavity opening with the  
second cavity chamber.

5. (Original) The injection molding apparatus of claim 1 wherein the first nozzle is  
connected to and in communication with a first melt distribution manifold, and the second nozzle  
is connected to and in communication with a second melt distribution manifold.

6. (Original) The injection molding apparatus of claim 1 wherein the shell material  
comprises two different materials.

7. (Original) The injection molding apparatus of claim 1 wherein the seal liner  
material comprises santoprene, and the shell material comprises polypropylene.

8. (Original) The injection molding apparatus of claim 1 wherein the first nozzle has  
an angled tip.

9. (Original) The injection molding apparatus of claim 1 wherein the first nozzle is thermal-gated and the second nozzle is valve-gated.

10. (Original) An injection molding apparatus for molding products comprising:

5 a first and a second seal liner cavity chamber for forming a seal liner, the first and second seal liner cavity chambers each having an outer edge;

a first and a second shell cavity chamber for forming a shell over the seal liner, the first shell cavity chamber being adjacent to the first seal liner cavity chamber, the second shell cavity chamber being adjacent to the second seal liner cavity chamber, the first and second  
10 shell cavity chambers each having a center;

a first and a second offset nozzle for a seal liner material, the first offset nozzle being positioned near the outer edge of the first seal liner cavity chamber, the first offset nozzle also being in communication with the first seal liner cavity chamber, the second offset nozzle positioned near the outer edge of the second seal liner cavity chamber, the second offset nozzle  
15 also being in communication with the second seal liner cavity chamber;

a first and a second center nozzle for a shell material, the first center nozzle being positioned near the center of the first shell cavity chamber, the first center nozzle also being in communication with the first shell cavity chamber, the second center nozzle positioned near the center of the second shell cavity chamber, the second center nozzle also being in communication  
20 with the second shell cavity chamber; and

a first, a second, a third, and a fourth mold core, the first mold core capable of being positioned in and moved between the first seal liner cavity chamber and the second shell

cavity chamber, the second mold core capable of being positioned in and moved between the first shell cavity chamber and the first seal liner cavity chamber, the third mold core capable of being positioned in and moved between the second seal liner cavity chamber and the first shell cavity chamber, and the fourth mold core capable of being positioned in and moved between the second shell cavity chamber and the second seal liner cavity chamber.

11. (Original) The injection molding apparatus of claim 10 wherein each mold core is rotationally moved between the cavity chambers.

12. (Original) The injection molding apparatus of claim 10 further comprising a stripper plate positioned around the mold core for removing shells from the mold core.

13. (Original) The injection molding apparatus of claim 10 wherein each mold core has an end opposite a base, the end having a seal liner portion for forming a seal liner cavity opening with the first cavity chamber, and a shell portion for forming a shell cavity opening with the second cavity chamber.

14. (Original) The injection molding apparatus of claim 10 wherein the first and second offset nozzles are connected to and in communication with a first melt distribution manifold, and the first and second center nozzles are connected to and in communication with a second melt distribution manifold.



15. (Original) The injection molding apparatus of claim 10 wherein the shell material comprises two different materials.

16. (Original) The injection molding apparatus of claim 10 wherein the seal liner  
5 material comprises santoprene, and the shell material comprises polypropylene.

17. (Original) The injection molding apparatus of claim 10 wherein the first and second offset nozzles each have an angled tip.

10 18. (Original) The injection molding apparatus of claim 10 wherein the first and second offset nozzles are thermal-gated, and the first and second center nozzles are valve-gated.

19. (Original) The injection molding apparatus of claim 10 wherein seal liners are formed on the first and third mold cores at about the same time as shells are formed on the  
15 second and fourth mold cores, and seal liners are formed on the second and fourth mold cores at about the same time as shells are formed on the first and third mold cores.

20. (Currently amended) In combination with an injection molding machine having at least a first material and a second material, an injection molding apparatus comprising:

20 a first cavity chamber for forming a seal liner, the first cavity chamber having an outer edge and a center;

a second cavity chamber for forming a shell, the second cavity chamber being adjacent to the first cavity chamber, the second cavity chamber having a center;

a first melt distribution manifold having a first material melt passage connected to and in communication with a first material injection entry, the first material injection entry being  
5 connected to and in communication with the first material of the injection molding machine;

a second melt distribution manifold having a second material melt passage connected to and in communication with a second material injection entry, the second material injection entry being connected to and in communication with the second material of the injection molding machine;

10 a first nozzle positioned near the outer edge of the first cavity chamber and offset from the center of the first cavity chamber, the first nozzle being in direct communication with the first cavity chamber and the first material melt passage;

a second nozzle positioned near the center of the second cavity chamber, the second nozzle being in direct communication with the second cavity chamber and the second  
15 material melt passage; and

a mold core positioned in and moved rotationally between the first and second cavity chambers.